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By:

Rebecca M. Whitel ck

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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of

Siani et al.

Examiner: Not yet assigned

Serial No: 09/144,838

Art Unit: 1615

Filed: August 31, 1998

For: **MODULAR PROTEIN LIBRARIES AND METHODS OF PREPARATION**

Assistant Commissioner for Patents
Washington, D.C. 20231

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TRANSMITTAL OF REFERENCES

Transmitted herewith are the following documents:

1. A copy of an Information Disclosure Statement Transmittal previously submitted on December 4, 1998
2. A copy of an Information Disclosure Statement and PTO form 1449 previously submitted on December 4, 1998
3. References Nos. ~~F1, D1-D3, D5, D6, D8, D9, D11, D12, D14, D16-D31, D33-D36, D38-D45, D50-D56, D59, and D60 cited on PTO form 1449, not previously submitted~~. These references are being submitted under separate cover as stated on the enclosed copy of the Information Disclosure Statement.
4. Fee Transmittal
5. Return Receipt Postcard, postage prepaid

The Commissioner is hereby authorized to charge any underpayment of the following fees associated with this communication, including any necessary fees for extension of time, or credit any overpayment to Deposit Account No. 03-3117:

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Respectfully submitted,

COOLEY GODWARD LLP

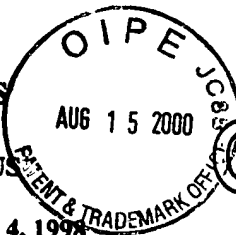
By: 
James A. Bradburne, Ph.D.
Reg. No. 38,389

Attorney Docket No: GRFN-020/01US

Express Mail Label Number: EM100149058US

Date of Deposit:

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By:

Elaine Calimquim

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of Michael A. Siani, et al.

Serial No.: 09/144,838

Examiner: Not yet assigned

Filed: August 31, 1998

Art Unit: 1615

For: MODULAR PROTEIN LIBRARIES AND METHODS OF PREPARATION

Assistant Commissioner for Patents
Washington, D.C. 20231

INFORMATION DISCLOSURE STATEMENT TRANSMITTAL

1. Transmitted herewith is:

☒ Fee Transmittal

☒ Information Disclosure Statement

☒ PTO Form 1449

☒ Copies of references listed on the PTO form 1449:

☐ Copies of all listed references are enclosed.

☒ Copies of the following listed references are enclosed: F2-F9, D4, D7, D10, D13, D15, D32, D37, D44, D46-D49, D57, and D58.

☒ Copies of the following listed references are not enclosed and will be submitted under separate cover: F1, D1-D3, D5-D6, D8-D9, D11-D12, D14, D16-D31, D33-D36, D38-D43, D45, D50-D56, and D59-D60.

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☐ English translation of foreign language reference(s)

☐ No copies of references listed on the PTO Form 1449 are being provided as this application claims continuation status to application Serial No. and copies of the listed references were provided in the parent application.

☐ Copy of foreign examination report

☐ English translation of foreign examination report

2. ☒ This Information Disclosure Statement is filed before the later of:

☐ three months from the filing date of this national application;

☐ three months from the date of entry of the national stage as set forth in 37 CFR 1.491 in an international application; or

☒ the mailing date of a first office action on the merits.

In accordance with 37 CFR 1.97(b), no fee is required.

3. ☐ This Information Disclosure Statement is filed after the events noted in paragraph 1, but before either:

☐ Final action under 37 CFR 1.113, or

☐ Notice of Allowance under 37 CFR 1.311.

In accordance with 37 CFR 1.97(c) also enclosed is:

☐ Fee under 37 CFR 1.17(p) in the amount of \$240.00; or

☐ Statement as stated below.

4. ☐ This Information Disclosure Statement is filed before the payment of the issue fee, but after either:

☐ Final action under 37 CFR 1.113, or

☐ Notice of Allowance under 37 CFR 1.311.

In accordance with 37 CFR 1.97(d) also enclosed is:

☐ Statement as specified in 37 CFR 1.97(e)

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- ☐ Petition requesting consideration of the Information Disclosure Statement; and
- ☐ The petition fee set forth in 37 CFR 1.17(i) in the amount of \$240.00.

5. Statement. The undersigned states:

- ☐ Each item of information contained in the Information Disclosure Statement cited herein was cited in a communication from a foreign Patent Office in a counterpart foreign application not more than three months prior to the filing date of this Information Disclosure Statement; or
- ☐ No item of information contained in the Information Disclosure Statement submitted herewith was cited in a communication from a foreign patent office in a counterpart foreign application and, to the knowledge of the undersigned, having made reasonable inquiry, was known to any individual designated in 37 CFR 1.56(c) more than three months prior to the filing date of this Information Disclosure Statement.

6. Fees


- ☐ Check in the amount of \$0.00 is attached.
- ☐ Please charge Deposit Account No. 03-3117 in the amount of \$0.00.
- ☒ No fee is required.
- ☒ The Commissioner is hereby authorized to charge any underpayment or credit any overpayment of the following fees associated with this communication to Deposit Account No. 03-3117:
 - ☒ Any patent application processing fees under 37 CFR 1.17.

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Respectfully submitted,
COOLEY GODWARD LLP

By:


James A. Bradburne, Ph.D.
Reg. No. 38,389

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Elaine Calimquim

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In re application of Michael A. Siani, et al.

Serial No.: 09/144,838

Examiner: Not yet assigned

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Art Unit: 1615

For: MODULAR PROTEIN LIBRARIES AND METHODS OF PREPARATION

Assistant Commissioner for Patents
Washington, D.C. 20231

INFORMATION DISCLOSURE STATEMENT

Applicant hereby submits this Information Disclosure Statement in accordance with 37 CFR 1.98 and pursuant to Applicant's continuing duty under 37 CFR 1.56 to bring any information which may be material to patentability of this application to the Examiner's attention.

Applicant makes no representation that a search has been conducted by the Applicant, or that there is not possibly more relevant art. Applicant also makes no representation that the information submitted herewith is in fact material.

☐

No copies enclosed: The references listed on the enclosed Form PTO 1449 have been previously cited by or submitted to the PTO as recited in the Information Disclosure Statement Transmittal that accompanies this paper. In accordance with the provisions of 37 C.F.R. 1.98(d), no copies of these references are being provided.

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- ☒ Copies enclosed: Copies of the following references listed on the enclosed Form PTO 1449 are being provided with this Information Disclosure Statement: F2-F9, D4, D7, D10, D13, D15, D32, D37, D44, D46-D49, D57, and D58.
- ☒ Copies not enclosed: Copies of the following references listed on the enclosed Form 1449 are not being provided with this Information Disclosure Statement, copies of these references will be forwarded under separate cover: F1, D1-D3, D5-D6, D8-D9, D11-D12, D14, D16-D31, D33-D36, D38-D43, D45, D50-D56, and D59-D60.
- ☐ The enclosed references were cited in a foreign examination report in a related case. A copy of the search report and the cited references are attached hereto.
- ☐ The search report is not in the English language and a translation of the search report is enclosed.
- ☐ At least one of the enclosed references is not in the English language.
- ☐ English translation(s) are enclosed.
- ☐ Enclosed is an explanation of the relevance of non-English references for which an English translation is not available.
- ☐ The explanation is in the form of an English language search report.

The subject application is believed patentable over any of the above references.

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Respectfully submitted,
COOLEY GODWARD LLP

By:


James A. Bradburne, Ph.D.
Reg. No. 38,389

JAB:

- Enclosures: 1. Form PTO 1449
2. Copies of the following listed references F2-F9, D4, D7, D10, D13, D15, D32, D37, D44, D46-49, D57, and D58 cited on Form PTO-1449

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APPLICANT:
Michael A. Siani, et al.

FILING DATE
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U.S. PATENT DOCUMENTS

EXAMINER INITIAL	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE
P1						

FOREIGN PATENT DOCUMENTS

	DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION	
						YES	N
F1	EP 0,156,588	02.10.85	Europe				
F2	EP 0,503,683	16.09.92	Europe				
F3	WO 93/20098	14.10.93	International				
F4	WO 95/00846	05.01.95	International				
F5	WO 95/04543	16.02.95	International				
F6	WO 95/34641	21.12.95	International				
F7	WO 96/34878	07.11.96	International				
F8	WO 94/01102	20.01.94	International				
F9	WO 98/28434	02.07.98	International				

OTHER PUBLICATIONS (including Author, Title, Date, Pertinent Pages, Etc.)

D1	Beall et al., "Site-directed mutagenesis of monocyte chemoattractant protein-1 identifies two regions of the polypeptide essential for biological activity," Biochemistry (1996) 313:633-640
D2	Ben-Efraim et al., "Secondary structure and membrane localization of synthetic segments and a truncated form of the IsK (minK) protein," Biochemistry (1994) 33:6966-6973
D3	Bleul et al., "The lymphocyte chemoattractant SDF-1 is a ligand for LESTR/fusion and blocks HIV-1 entry," Nature (1996) 382:829
D4	Boshoff et al., "Angiogenic and HIV-inhibitory functions of KSHV-encoded chemokines," Science (1997) 278:290-294

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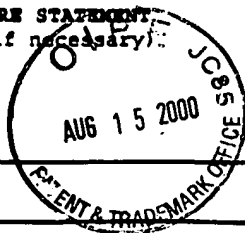
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D6	Bunin et al., "The combinatorial synthesis and chemical and biological evaluation of a 1,4-benzodiazepine library," <i>Proc. Natl. Acad. Sci. USA</i> (1993) 91:4708-4712
D7	Campbell et al., "Chemokines and the arrest of lymphocytes rolling under flow conditions," <i>Science</i> (1998) 279:381-384
D8	Canne et al., "Total chemical synthesis of a unique transcription factor-related protein - CMYC-MAX," <i>J. Am. Chem. Soc</i> (1995) 117:2998-3007
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D11	Carrasco et al., "Direct monitoring of organic reactions on polymeric supports," <i>Tetrahedron Letters</i> (1997) 38:6331-6334
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D13	Cohen, "Exploiting the HIV-Chemokine Nexus," <i>Science</i> (1997) 275:1261-1264
D14	Cwirla et al., "Peptides on phage: a vast library of peptides for identifying ligands," <i>Proc. Natl. Acad. Sci. USA</i> (1990) 87:6378-6382
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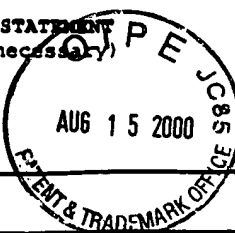
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| D18 | Dos Remedios et al., "Fluorescence resonance energy transfer measurements of distances in actin and myosin," <i>J. Muscle Res. Cell Motility</i> (1987) 8:97-117 |
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| D29 | Hromas et al., "Cloning and characterization of exodus, a novel beta-chemokine," <i>Blood</i> (1997) 89(9):3315-3322 |
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| D31 | Maggiora et al., "A general method for the preparation of internally quenched fluorogenic protease substrates using solid-phase peptide synthesis," <i>J Med. Chem.</i> (1992) 35:3727-3730 |
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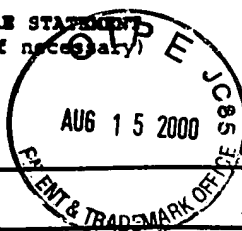
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D45	Schnölzer and Kent, "Constructing proteins by dovetailing unprotected synthetic peptides: backbone-engineered HIV protease," <i>Science</i> (1992) 256:221-225
D46	Siani et al., "Rapid modular synthesis of chemokines and analogues," Poster, pp. 1-13, International Business Communications 3 rd Annual International Conference on Chemokines, San Francisco, CA, U.S.A., September 30-October 1 st , 1996.
D47	Siani, et al., "Rapid modular total chemical synthesis of chemokines based on genome sequence data," Poster #360, pp. 1-6, The 15 th American Peptide Symposium, Nashville, Tennessee, U.S.A., June 14-17, 1997
D48	Siani et al., "Rapid modular synthesis of SDF-1α with full biological activities," Poster, pp. 1-12, MMHCC, Chemokines and Host-Cell Interaction Conference, Baltimore, Maryland, U.S.A., January 1997
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| D51 | Sticht et al., "Structure and activity of a chimeric interleukin-8-melanoma-growth-stimulatory-activity protein," <i>Eur. J. Biochem.</i> (1996) 235:26-35 |
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| D56 | Wilken et al., "Solid Phase Chemical Ligation-A Paradigm for Post Genomic Pharmaceuticals," Fifth International Symposium on Solid Phase Synthesis and Combinatorial Chemical Libraries, London, England, U.K., (September 4, 1997) |
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| D58 | Wu et al., "Resonance energy transfer: methods and applications," <i>Analytical Biochem.</i> (1994) 218:1-13 |
| D59 | Zhang et al., "Preparation of functionally active cell-permeable peptides by single-step ligation of two peptide modules," <i>Proc. Natl. Acad. Sci. USA</i> (1998) 95:9184-9189 |
| D60 | Zuckermann et al., "Discovery of nanomolar ligands for 7-transmembrane G-protein-coupled receptors from a diverse N-(substituted) glycine peptoid library," <i>J. Med. Chem.</i> (1994), 37:2678-2685 |

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